# **Department of Homeland Security Office of Emergency Communications**



# Statewide Communication Interoperability Plan (SCIP) Implementation Workshop – Wisconsin

**Summary Report** 

Version 1.0

May 2012

# TABLE OF CONTENTS

INTRODUCTION	1
WORKSHOP KICK-OFF	
OPENING REMARKS	
PURPOSE & OUTCOMES	
OEC UPDATE PRESENTATION	2
NATIONAL EMERGENCY COMMUNICATIONS PLAN (NECP)	
FEDERAL GRANTS	
REGIONAL COORDINATION PROGRAM	3
OEC TECHNICAL ASSISTANCE	4
Narrowbanding	4
NECP GOAL 2 RESULTS	4
Wisconsin Data Systems	5
Planning for Wireless Broadband MODULE	6
Broadband 101	
MAKING BROADBAND A PRIORITY - IDENTIFYING KEY STAKEHOLDERS	11
DEVELOP SCIP INITIATIVES	12
NEXT STEPS AND WRAP UP	12
APPENDIX A –ACRONYMS	A-1
APPENDIX B – WORKSHOP MATERIALS	B-1
APPENDIX C – WORKSHOP PARTICIPANTS	

# INTRODUCTION

The Statewide Communication Interoperability Plan (SCIP) continues to be a critical tool to help States prioritize resources, establish or strengthen governance, and address interoperability gaps. The Department of Homeland Security (DHS), Office of Emergency Communications (OEC) continues to support States and territories in the implementation of their SCIP by providing annual SCIP Implementation Workshops. These participatory and hands-on workshops bring together Federal, State, local, tribal, and territorial representatives to identify and address communications interoperability gaps to facilitate successful implementation of the SCIP.

Wisconsin conducted its SCIP Implementation Workshop on May 1, 2012, with a focus on planning for wireless broadband. The Wireless Broadband Workshop assists States in developing a strategic narrative for broadband planning activities and initiatives in preparation for the Nationwide Public Safety Broadband Network (NPSBN). The objectives for Wisconsin were to gain a consistent understanding of wireless broadband for public safety, define broadband initiatives for inclusion in the Statewide Communication Interoperability Plan (SCIP), and increase coordination among stakeholders and between the Interoperability Council. This report provides a summary of the one day Workshop and is organized into the following Sections—

- Workshop Kick-Off
- OEC Update Presentation
- NECP Goal 2 Results
- Wisconsin Data Systems
- Planning for Wireless Broadband Module
- Appendix A—Acronyms
- Appendix B—Workshop Materials
- Appendix C—Workshop Participant List.

# WORKSHOP KICK-OFF

Mr. David Spenner, Wisconsin Statewide Communications Interoperability Manager, opened the Workshop and welcomed participants. He introduced the facilitation team: Adrienne Werner, OEC Stakeholder Branch, Jim Jarvis OEC Regional Coordinator (RC) for Region V; and Scott Wiggins, Workshop Facilitator and OEC Support, Lauren DeWolfe, Workshop Co-Facilitator and OEC Support. Mr. Spenner then asked Sheriff Matt Joski, Wisconsin Interoperability Council Chair to provide opening remarks.

# **OPENING REMARKS**

Sheriff Joski thanked participants for traveling to attend the workshop. He announced that on April 30, 2012, the Wisconsin Interoperable System for Communications (WISCOM), a statewide communications system that will allow first responders to communicate on one network was completed. He indicated that the next step for Wisconsin is to begin planning for data capabilities, and that each participant has a different capability and expertise (e.g., governance, technical) and brings a different and valuable perspective to the table.

## **PURPOSE & OUTCOMES**

Mr. Scott Wiggins articulated the Workshop purpose, which was to develop a strategic narrative for broadband planning activities and initiatives in anticipation of the NPSBN. Outcomes for the day included defining new broadband initiatives for inclusion in the SCIP and increased coordination among stakeholders and between the Interoperability Council in broadband planning. Mr. Wiggins then asked participants to introduce themselves and indicate what they wanted to take away from the day's session. Some of the responses included:

- To understand the concept of broadband and how the technology can help Wisconsin
- To understand broadband enough to share information with other stakeholders and decision makers
- To plan for the deadlines and timeframes associated with the deployment of the NPSBN
- To understand the costs associated with the NPSBN and how it will be funded
- Nearly all attendees indicated a desire to learn more about the various aspects of broadband

Mr. Wiggins then transitioned to Ms. Adrienne Werner to provide an update on the OEC activities and priorities.

# **OEC UPDATE PRESENTATION**

Ms. Werner and Mr. Jim Jarvis delivered an update on OEC activities. OEC was established in 2007 to serve as the central coordination point between Federal, State, local, tribal and territorial emergency communications stakeholders and government officials to address challenges and develop solutions to improve operability, interoperability and continuity of communications. Ms. Werner showed the Interoperability Continuum, which demonstrates the complexity of achieving interoperability and the importance of governance, standard operating procedures (SOPs), technology (both voice and data), training and exercises, and usage. The Continuum served as a framework for the SCIPs and the National Emergency Communications Plan (NECP). OEC continues to use the Continuum to measure capabilities and explain the ongoing challenges of emergency communications. Additional information on the Interoperability Continuum is available on the SAFECOM website:

http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx.

# NATIONAL EMERGENCY COMMUNICATIONS PLAN (NECP)

The NECP is a national plan, developed in partnership with public safety stakeholders; it sets milestones and objectives, and contains three performance-based goals. Released in 2008, it is the first national strategic plan for emergency communications that establishes a vision for all levels of government. NECP Goal 1 focused on Urban Areas Security Initiative (UASI) regions, and Goal 2 focused on counties and county-equivalents. OEC is in the early stages of developing an updated NECP. Consistent with the methodology OEC used to develop the first NECP, OEC will engage stakeholders later this year to provide input into the new plan. The updated NECP will incorporate the deployment of the NPSBN while also providing a strategy for continued improvement of Land Mobile Radio (LMR) communications. Since the updated plan will be in place before the Goal 3 2013 deadline, OEC has decided it would be more appropriate to implement Goal 3 as a part of the updated NECP. Depending on stakeholder input and the final language of the updated NECP, it could mean a new timetable and even different requirements/language than how Goal 3 is currently defined in relation to catastrophic

emergency communications. The new Goal 3 will need to take into consideration a lot of things that have transpired since the NECP was released in 2008 – including broadband, results of Goal 2, and lessons learned/best practices gleaned from real world disasters in recent years, notably the floods, hurricane, earthquake, and tornadoes of the past year. Additional information on the NECP is available on the SAFECOM website:

http://www.safecomprogram.gov/natlemergencycommplan/Default.aspx.

# FEDERAL GRANTS

Ms. Werner provided an update on Federal grants. The SAFECOM Grant guidance is intended for State, local, and tribal grantees to use when planning and applying for Federal communications grants. It addresses emergency communications priorities, an overview of the current grants environment, and an appendix of additional resources. The guidance also includes the following emergency communications priorities:

- Leadership and governance
- Statewide planning for emergency communications
- Emergency communications training and exercises
- Other integral emergency communications activities
- Standards-based equipment
- Investment and migration planning for next generation technologies.

Ms. Werner shared that OEC has also been coordinating grant guidance at the Federal level. More than 40 Federal grant programs now have recommendations to ensure consistency in requirements. This is especially important as public safety begins using Federal grants for wireless broadband. In Fiscal Year (FY) 2012, grantees may see further reduction and streamlining of grants, increased reporting and accountability requirements, and a new Federal initiative affecting preparedness grants – Presidential Policy Directive 8 (PPD-8). The PPD-8 focuses on building three key concepts: An "All-of-Nation" and "Whole of Community" approach to security and resilience, integrating efforts across Federal, State, local, tribal, and territorial governments; key capabilities required to confront any challenge; and a consistent assessment system methodology, focused on outcomes used to measure and track progress to achieve our National Preparedness Goal. Additional information on PPD-8 is available on the Department of Homeland Security (DHS) website:

http://www.dhs.gov/xabout/laws/gc\_1215444247124.shtm. OEC has released the SAFECOM Guidance to ensure grantees can use the FY 2012 SAFECOM Guidance to plan their investments. The document can be found on the SAFECOM

website: <a href="http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=334">http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=334</a>.

# REGIONAL COORDINATION PROGRAM

Mr. Jarvis reviewed the Regional Coordination Program, which was set up to support the efforts of Federal, State, local, and tribal stakeholders to build and improve emergency communications capabilities across the Nation. OEC Regional Coordinators provide information on OEC programs and activities to Federal, State, local, and tribal agencies, and they provide OEC input on emergency communications activities. As the Region V Regional Coordinator, Mr. Jarvis works with the Regional Coordinators from the other Regions to ensure information and best practices from across the Nation are shared. Mr. Jarvis indicated that four other SCIP workshops

have been or will be conducted in the Region (e.g., Illinois, Indiana, Minnesota, and Ohio) and all focus on broadband.

# **OEC TECHNICAL ASSISTANCE**

The OEC Technical Assistance (TA) program works with stakeholders onsite and focuses on addressing the various technical needs of State and local entities. Since its inception, OEC has assisted with more than 700 TA engagements throughout the 56 States and territories. Mr. Jarvis provided an overview of the program. Additional information on TA is available on the SAFECOM website:

http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=328.

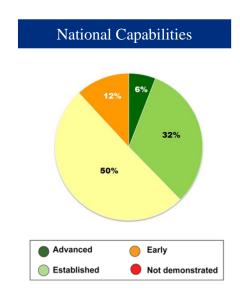
### **NARROWBANDING**

Mr. Jarvis reviewed Wisconsin's narrowbanding status based on public safety licensing data from the Federal Communications Commission (FCC), which is updated weekly on <a href="http://www.publicsafetytools.info/narrowband/national\_tracking.php">http://www.publicsafetytools.info/narrowband/national\_tracking.php</a>. The licensing data shows that the majority of transmitters are not yet licensed to meet the narrowbanding goal. Nineteen percent of transmitters in the State have been licensed to operate narrowband (12.5 kHz), 40 percent are licensed to operate both narrowband and 25 kHz, and 41 percent are licensed to operate 25 kHz only. Mr. Jarvis reminded participants of the January 1, 2013, deadline, and asked participants to encourage others to update their licenses

# **NECP GOAL 2 RESULTS**

Mr. Jarvis provided a national and Wisconsin-specific NECP Goal 2 Results update. OEC has Goal 2 data from approximately 75 percent of the Nation's counties, and is currently in the process of analyzing the data. A preliminary analytical finding is that States with high scores on Communications Unit Leader (COML) and SOPs also tend to have high performance scores. Overall, Goal 2 scores indicate that significant progress has occurred across the Nation since the 2006 National Interoperability Baseline Survey was conducted. Below is a summary of the Goal 2 preliminary findings, broken out by performance data and capabilities data.





Mr. Jarvis displayed information gleaned from the NECP Goal 2 responses in Wisconsin related to the percentage of responses using mobile data. This slide demonstrated the use of mobile data on private networks and commercial networks was prevalent in the State.

# WISCONSIN DATA SYSTEMS

Mr. Tom Swadley, Management Information Coordinator, provided an overview of the vision and mission of FoxComm. FoxComm is a public safety communications partnership consisting of Calumet, Outagamie, and Winnebago counties. It serves 25 law enforcement agencies, 57 fire agencies, 29 emergency medical service (EMS) districts, and three 9-1-1 communications centers. The mission of FoxComm is to coordinate and support shared information and communications technologies to enhance safety, expand cost effective benefits, create and maintain a plan for expanding the needs of the stakeholder served, and facilitate the expansion of FoxComm services to other community and private sector entities. Mr. Swadley gave an overview of the current FoxComm projects, including the 700 megahertz (MHz) broadband waiver application. In March 2010, FoxComm received a waiver from the FCC and began planning for the build-out of the public safety broadband network in the tri-county area. The vision for the project is to achieve cost savings in the build-out and for the devices to provide law enforcement agencies with access in the field to routine criminal justice information, video capability for fire agencies, and streaming capabilities for EMS to provide patient vitals and video to the emergency room for diagnosis and appropriate treatment while en route to the hospital. Participants asked Mr. Swadley questions about FoxComm including plans for providing interoperability with the very high frequency (VHF) overlay. Mr. Swadley indicated that there will be VHF available for mutual aid response.

Mr. Carl Guse, Wisconsin State Patrol, provided an overview of the use of data by the Department of Transportation and the Wisconsin State Patrol. The system provides network access to 150 Federal, State, and local agencies through over 100 tower sites. It operates in the VHF band and also utilizes Wi-Fi hotspots. The access to the network is free of charge, and the agencies that wish to utilize this capability purchase their own equipment. Mr. Guse took questions from participants including a discussion of the coverage area, and the notion of having a future meeting to see how this capability can be integrated and utilized by other agencies in the State. Mr. Guse indicated this capability is built so that it can be used on a statewide basis with a minimum of 3G service.

Mr. Alan Wisler, Marathon County, provided a brief overview of the data systems used in the county. The data capability utilizes three 800 MHz sites in the county to provide county location mapping in law enforcement vehicles. The information is refreshed and reloaded depending on how fast a vehicle is traveling. When a vehicle is at a standstill, the data reloads less frequently, but if it were to travel at 80 miles per hour, it would reload faster. The county also utilizes a paperless system for citation ticketing. This capability has reduced the response time to routine incidents (e.g., deer struck) and has been an essential tool for the county.

# PLANNING FOR WIRELESS BROADBAND MODULE

Mr. Wiggins led participants through a SWOT analysis discussion, used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in the building of a broadband system for first responders in Wisconsin. The table below summarizes the response provided by participants:

# **Strengths**

# What has been successful?

- Established relationships, working groups, and methods to work together. We have proven success in this area
- Existing governance has a record with providing information and coordination with stakeholders at the state and local level
- Working on cooperative projects and sharing resources (e.g., tower projects with county and state patrol)
- State Administrative Agency (SAA)
   experienced in handling funds in an appropriate
   manner
- Engaged stakeholders already in the process (e.g., FoxComm)
- Knowledge and inventory of the tower sites to achieve statewide interoperability, physical infrastructure and backhaul
- Level of understanding of the emerging technologies
- Understanding of the stringent requirements for public safety sites having to be hardened (in contrast to cellular sites)
- Coordination with neighboring states is strong

# Weakness

# What has been challenging?

- Identifying a sustainable funding source
- Home rule status affects progress
- Ongoing education and understanding of the value of the Office of Justice Assistance and the coordination role that they play
- Want to be ahead of progress, but feel like we are behind in the discussions on broadband
- Legislation support, executive support
- Selling the benefits of this system to decision makers and end users, particularly in a time of limited funding
- How to provide equal coverage across the geography of Wisconsin (e.g., rural areas)
- Understand what is wanted vs. what is needed, and how broadband can improve first responders ability to do their job
- Concern redundancy within the State in terms of broadband planning

# **Opportunities**

# What are areas of improvement for interoperability planning and coordination?

- Federal grant funds and Federal partnership support
- Spectrum allocation
- Potential for partnerships with private entities
- LTE standard (not defined, but direction is set)
- Proven technology that has been in use in the State
- Lessons learned from real incident responses
- Lessons learned from real world incidents

# **Threats**

# What challenges does the State need to be prepared to address?

- Loss of funding, no support from Federal government
- How the funding will be allocating in the State and how it may adversely impact Wisconsin
- Maintain relevancy in the conversation
- Private sector will the commercial networks come to a roaming agreement?
- Governing bodies seeing the NPBSN as duplicative of the commercial networks capability
- FirstNet may not meet Wisconsin needs
- Diversion of funding and resources to focus on broadband planning is leaving a blind spot from the traditional "all hazards approach"

## **BROADBAND 101**

Mr. Wiggins opened the broadband 101 portion of the module with a review of the history of commercial wireless communications, the evolution of LMR, the applicability of broadband technology to the public safety environment, and the landscape of broadband today. There have been exponential increases in speed and capacity of communications and public safety has been in line with these developments throughout. Unfortunately, as LMR technology has become more complex, interoperability has suffered. Mr. Wiggins shared there is no broadly accepted definition of broadband; however, as of 2010, the FCC defined "basic broadband" as:

"Basic Broadband" as defined by the FCC in 2010:

"Data transmission speeds of at least 4 Megabits per second (Mbps), downstream and 1 Mbps upstream"

Mr. Wiggins discussed the current uses of mobile data by public safety. Many jurisdictions have multiple data systems overlaid to support different types and capacities of data transmissions. Challenges with data interoperability among public safety owned data systems are even greater than with LMR. Commercial systems are offered, but it is a consumer-grade product – not mission critical – which results in significant drawbacks from a lack of reliability, redundancy, and sustainability.

Mr. Wiggins reviewed the public safety communications evolution as it transitions from today's technology to the desired long term state of convergence. In the current state of communications, LMR networks, commercial broadband networks, and a nationwide public safety wireless broadband network are evolving in parallel. As communications evolve, public safety will continue to use the reliable mission critical voice communications offered by traditional LMR systems; at the same time, agencies will begin or continue to implement emerging wireless broadband services and applications. During the transition period, public safety will begin building out a dedicated public safety wireless broadband network and public safety organizations will begin to transition from the use of commercial broadband services to the public safety dedicated network. Mr. Wiggins shared several challenges associated with this transition period:

# Challenges with Transition from LMR to the NPSBN:

- Governance: Need coordinated, centralized decision making that is not cumbersome and that meets the needs of all while allowing for local provisioning (coverage, capacity)
- Political Buy-In: Public officials will be hard pressed to see the value in building a secondary/overlay network in addition to maintaining, not replacing, LMR for an indefinite period of time while technology advances to make voice over broadband robust for public safety's critical mission
- Enforcement: The newly authorized First Responder Network Authority (FirstNet) should remove many obstacles to permit national-level policies for a nationwide network
- Determining the proper level of control at every level: Who is the owner/manager/user to ensure needs are met?

- Evolution of the Network: Need the network to evolve in a coordinated manner nationwide to foster convergence and maintain interoperability
- Capacity: Must meet capacity needs for the applications desired. Public Safety will have to balance capacity needs with funding, coverage, and operational use cases
- Commercial Roaming: Need to partner with carriers on a national basis to develop viable roaming arrangements that are cost effective and technically sound. Assuming commercial carriers want to participate, liability and indemnification issues will also need to be addressed
- Access: Need to be able to seamlessly roam to/from commercial networks and have authorized access mobility to the public safety Sub Networks as you move

Mr. Wiggins reiterated points provided by Mr. Swadley in communicating the intent of the NPSBN, which is to provide the ability for emergency responders to exchange information via data, voice, and video as authorized, to complete their missions. He also described the components of the NPSBN. Mr. Wiggins provided further background information on broadband including the definition of Long Term Evolution (LTE) as a commercial wireless technology that allows substantially higher data transmission rates; the benefits of LTE; the definition of voice over LTE as the ability to allow a voice call to be processed through and over an LTE system; and information on public safety's selection of LTE as the standard for broadband. One of the concerns expressed by public safety with LTE is that there is no "direct-mode or simplex" capability. LTE was not originally designed to support voice, especially not mission critical voice, and this standard is still under development today. Mr. Wiggins led a discussion on the current (in addition to the presentations provided previously) and the planned uses of data applications in Wisconsin and received the following responses from participants:

# Current and Planned Uses of Data Applications in Wisconsin:

# Current Use

- City of Fond du Lac: Utilizes aircards and Wi-Fi hotspots. The city is exploring installing cameras downtown for law enforcement officers to access. .
- Gold Cross Ambulance Service: Ability to transmit mobile data communications from the Computer Aided Dispatch (CAD) systems to wireless hotspots in the ambulances.

### Potential Use

- Door County: Exploring the implementation of broadband capabilities
- Milwaukee Police Department: Testing 4G license plate readers

Mr. Wiggins also reviewed potential benefits of the NPSBN; however, he emphasized to ensure responders' needs are met, public safety must insist broadband networks deliver highly reliable public safety-grade services and applications. Participants indicated the NPBSN could provide for more efficient emergency response and improve safety. However, participants expressed some concerns that the NPSBN would not meet their needs and would lack reliability and quality of service in Wisconsin (e.g., coverage gaps).

Mr. Wiggins provided an overview of the NPSBN related legislation since 1997. The NPSBN has been a long-term effort beginning in 1997 with the allocation of 24 MHz of 700 MHz spectrum to public safety. The effort continued with the 2007 law to establish a public-private partnership with the Public Safety Spectrum Trust (PSST) to hold the Public Safety Broadband License. The law also directed the FCC to auction a 10 MHz portion of the spectrum known as

the "D-block" for combined public safety and commercial uses, but the auction was not successful as the reserve price for the spectrum was not met. In 2010, the FCC released a waiver order granting 21 waivers to entities wishing to build a local broadband capability. In 2011, the Administration announced support for reallocation of the D block to the public safety community and funding to build the nationwide network.

Ms. Werner then briefly reviewed the newly enacted legislation called the Middle Class Tax Relief and Job Creation Act of 2012. The table below outlines a few highlights from the legislation:

# Highlights of the Enacted NPSBN Legislation:

- On February 22, 2012, the President signed the Middle Class Tax Relief and Job Creation Act of 2012
  - Reallocates the 700 MHz D Block spectrum to public safety
  - Authorizes the FCC to conduct incentive auctions to raise \$7 billion for building and managing the NPSBN
  - Sets aside \$20.4 billion in incentive auction revenue for deficit reduction
- Access to the NPSBN is provided for:
  - Emergency response providers, including Federal, State, and local governmental and non-governmental emergency public safety, fire, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities
  - Secondary users including non-public safety entities (e.g., utilities, critical infrastructure providers)
  - o The NPSBN is precluded from providing commercial services directly to consumers

Ms. Werner highlighted the component of the legislation which requires public safety agencies using T-band (470-512 MHz) spectrum to vacate the spectrum by the year 2021. This spectrum is licensed to public safety agencies in several metropolitan areas and the FCC is aware of the issue with those jurisdictions that have not narrowbanded. Funding will be available to assist in their relocation; however, she pointed out this does not impact the State of Wisconsin.

Mr. Jarvis explained that the legislation provides \$7 billion to go to the Network Construction Fund, which will be administered by FirstNet. Until the spectrum auctions are held, National Telecommunications and Information Administration (NTIA) will be able to borrow \$2 billion for FirstNet's network planning and deployment. The legislation also creates a State and Local Implementation Grant Fund. The Fund provides \$135 million to NTIA and FirstNet to support State and local planning efforts for integration into the NPSBN. There is a 20% match for these grant funds and a distribution model has yet to be determined. Mr. Jarvis encouraged participants to interrelate their broadband planning work associated with this future grant with their SCIP.

Mr. Jarvis also reviewed the governance and access details within the newly enacted NPSBN legislation. He provided highlights on the NPSBN Governance Boards:

# NPSBN Governance Boards:

- First Responders Network Authority (FirstNet)
  - Established for planning, construction, and operation of the NPSBN

May 2012

- o FirstNet will consist of 15 Board members, including:
  - The DHS Secretary, the Attorney General, the Office of Management and Budget (OMB) Director, and 12 other members appointed by the Secretary of Commerce representing a variety of government and public safety interests and subject matter expertise
- FCC Technical Advisory Board for First Responder Interoperability
  - Responsible for developing minimum technical requirements for the NPSBN to ensure nationwide interoperability
  - The Technical Advisory Board will consist of 14 voting members and 1 non-voting member:
    - Four will represent public safety
    - Three will represent State and local governments
    - Four will represent wireless providers (two national, one regional, and one rural)
    - Three will represent equipment manufacturers
  - The Interoperability Board will be terminated by July 6, 2012, after the technical requirements are submitted

The legislation also creates a nationwide governance structure to oversee the network and ensure interoperability is built in from the start. This governance structure – FirstNet – is an independent authority and will serve as the public safety broadband wireless licensee. FirstNet responsibilities are to operate the NPSBN and consult with Federal, State, tribal, and local public safety entities, National Institute of Standards and Technology (NIST), FCC, and the public safety advisory committee.

The areas of consultation as defined in the legislation include: Management, standards, certified equipment list, requests for proposals, commercial infrastructure, contracts, cyber-security, public safety answering points, rural deployment, and prohibition of the provision of consumer services. The Technical Advisory Board for First Responder Interoperability is a short-term entity, created through the FCC, to develop minimum technical requirements for the NPSBN based on LTE standards to ensure nationwide interoperability. The nomination period for Interoperability Board members is now closed. The Board's minimum technical requirements must be submitted to the FCC no later than May 22, 2012. The FCC then has 30 days to review, approve, and finalize technical requirements before transmitting them to FirstNet by June 21, 2012.

It is expected that the Interoperability Board will develop the technical requirements based on work previously conducted by other organizations like NPSTC. Access to the network is broadly defined to include Federal, State, local, and tribal public safety and government officials, and also secondary users. This is important because it will allow for interoperable communications among multiple disciplines and levels of government, but allowing "secondary" users on the network may also generate revenue for ongoing operations of the network.

Mr. Jarvis discussed the role of State and locals as described in the newly enacted NPSBN legislation. He shared several considerations for State and local coordination:

State and Local Coordination Considerations:

State and local stakeholders will play a key role in providing input to FirstNet

- All coordination will go through a single person or governmental body selected at the State level
- This person or body will need to be named as a part of the State and Local Implementation Grant Program
- SWICs and State governing bodies should gain familiarity with this part of the legislation
- SWICs should discuss their role with the SAA and be a part of the discussion within the State on who will be the single point of contact to FirstNet
- States may need to revise the membership of an existing governance body to ensure it has the right experience/knowledge to work with FirstNet

A key component of the role of States and locals is broadband planning to ensure interoperability. OEC is currently working with States to develop initial broadband plans and incorporate these planning efforts into their existing SCIP. The legislation does allow States to opt out of participating in the NPSBN and build their own Radio Access Network (RAN); however, there are very aggressive timelines associated with this opt-out and all plans must be approved by the FCC and NTIA. There is no time requirement in the legislation for FirstNet to issue and complete the Request for Proposal (RFP), which is when FirstNet will inform Governors of FirstNet's recommended State Plan for build-out and funding levels, and it will likely take some time for this to be completed. Until the RFP is complete, States do not need to make any decisions or take actions on State opt-out. States should have an opportunity to talk with FirstNet about their plan and provide FirstNet with the opportunity to remedy their concerns before the deadline for opting-out. Federal users may want to engage with the State on coverage in those areas. If the FCC disapproves the plan, FirstNet would continue with implementation in the State. Mr. Jarvis emphasized the need for States to educate their leadership on the details of the legislation to preclude continuation of erroneous information spreading.

Mr. Jarvis closed the NPSBN legislation overview portion of the module with a discussion on several topics, including: Additional use/re-allocation of spectrum, including the D-block, 700 MHz narrowband, and the UHF T-band; on-going funding through network user fees, lease fees for network capacity, and lease fees for network equipment/infrastructure; the Next Generation 911 Advancement Act, which is contingent on meeting the deficit reduction threshold; and the amateur radio study that will be conducted by the FCC in consultation with OEC.

Mr. Wiggins concluded the broadband 101 portion of the module by sharing information on the current FCC waiver jurisdictions. He reviewed the status of the broadband projects being executed by those waiver jurisdictions that received Broadband Technologies Opportunities Program (BTOP) grant funding. This information was based on publicly available quarterly reports submitted to the FCC. It is unknown at this time how the recently enacted legislation will impact the waiver jurisdictions; however, FirstNet could benefit from absorbing the Sub Networks that have been built or are being built due to their expense. The hope is these waiver jurisdictions will provide significant lessons learned for future broadband projects. The waiver jurisdictions have and continue to face significant challenges that will carry over into the development of the NPSBN.

# MAKING BROADBAND A PRIORITY - IDENTIFYING KEY STAKEHOLDERS

Mr. Wiggins led participants through an exercise and discussion to identify stakeholders in Wisconsin that would need to be part of broadband planning. The participants identified the

opportunity to bring additional stakeholders to the table and reinvigorate efforts to share information with local governments. The participants mentioned the following key stakeholder groups that could work with the existing Interoperability Council for broadband planning efforts:

- Public Service Commission
- Private entities (e.g., BadgerNet, Wisnet)
- End users from each Regional Council to supplement the efforts of the Regional Council Chairs

# **DEVELOP SCIP INITIATIVES**

After discussing the key stakeholder groups to be included and how the broadband effort could be governed under the existing Interoperability Council, participants offered new broadband-related initiatives for Wisconsin's SCIP. The identified the following potential SCIP initiatives:

<b>Initiative</b>
<ul> <li>Educate the Interoperability Council on the pending broadband decisions</li> </ul>
<ul> <li>Designate an existing subcommittee on the Interoperability Council to undertake broadband planning</li> <li>Members could be from the Standards Working Group and the Statewide Planning Working Group as well as include the additional stakeholders mentioned to undertake the different aspects of the planning effort</li> <li>Participants mentioned a potential first step is to include this discussion as an agenda item on the next Interoperability.</li> </ul>
discussion as an agenda item on the next Interoperability  Council meeting
<ul> <li>Develop an understanding of baseline requirements for Wisconsin's data needs</li> <li>Deploy a broadband network that is reliable for public safety first responders</li> </ul>

Participants discussed the value of conducting a half-day meeting for all stakeholders to participate. The purpose of this meeting would be to understand the comprehensive current broadband capabilities in the State. The outcome of the meetings could include an understanding of the capabilities across the State, and to begin to create a timeline to understand what needs to happen in the short-term and long-term to be prepared for the release of the NPSBN RFP. Participants concluded the discussion stating this meeting could engage additional stakeholders to reinforce the Interoperability Council's bottom up approach to broadband planning.

# **NEXT STEPS AND WRAP UP**

Mr. Wiggins thanked attendees for their interest and participation and shared Mr. Spenner will be distributing the meeting report, which will include the summary of discussions and recommended SCIP initiatives. Sheriff Joski and Mr. Spenner also thanked the group and

encouraged them to continue to attend future working group sessions to continue providing input to Wisconsin statewide interoperability planning efforts.

# APPENDIX A -ACRONYMS

3G Third Generation

BTOP Broadband Technologies Opportunities Program

CAD Computer-Aided Dispatch
COML Communications Unit Leader
DHS Department of Homeland Security
EMS Emergency Medical Service

FCC Federal Communications Commission FirstNet First Responder Network Authority

FY Fiscal Year

LMR Land Mobile Radio
LTE Long Term Evolution
Mbps Megabits per second

MHz Megahertz

NECP National Emergency Communications Plan
NIST National Institute of Standards and Technology
NPSBN Nationwide Public Safety Broadband Network

NPSTC National Public Safety Telecommunications Council

NTIA National Telecommunications and Information Administration, U.S. Department

of Commerce

OEC Office of Emergency Communications, U.S. Department of Homeland Security

OMB Office of Management and Budget
PPD-8 Presidential Policy Directive 8
PSST Public Safety Spectrum Trust

RAN Radio Access Network RC Regional Coordinator RFP Request for Proposal

SAA State Administrative Agency

SCIP Statewide Communication Interoperability Plan

SOP Standard Operating Procedure

SWIC Statewide Interoperability Coordinator

TA Technical Assistance VHF Very High Frequency

WISCOM Wisconsin Interoperable System for Communications

UASI Urban Areas Security Initiative

UHF Ultra High Frequency

May 2012 A-1

# APPENDIX B – WORKSHOP MATERIALS

Title	Description	Document
SCIP Broadband – Wisconsin	SCIP Implementation Workshop Presentation	Wisconsin SCIP Workshop_Presentati
FoxComm: A Vision of Seamless Integrated Public Safety Communication	FoxComm Mission and Vision Presentation	FoxComm Presentation_SCIP W

May 2012 B-1

# WISCONSIN STATEWIDE COMMUNICATION INTEROPERABILITY PLAN (SCIP) IMPLEMENTATION WORKSHOP MAY 1,2012 1825 NORTH BLUEMOUND DRIVE APPLETON, WI 54914

# **WORKSHOP AGENDA**

8:30 am – 9:15 am	<ul> <li>Welcome, Introductions</li> <li>David Spenner, Wisconsin State Interoperability Coordinator</li> <li>Adrienne Werner, Stakeholder Engagement, Office of Emergency Communications (OEC)</li> <li>James Jarvis, OEC Regional Coordinator (RC)</li> </ul>
9:15 am – 9:30 am	<ul> <li>Opening Remarks</li> <li>Sheriff Matt Joski, Chair, Statewide System Management Group</li> </ul>
9:30 am – 9:45 am	<ul><li>Workshop Logistics</li><li>Scott Wiggins, OEC Support, Facilitator</li></ul>
9:45 am – 10:15 am	<ul><li>Update on OEC Service Offerings and Activities</li><li>Adrienne Werner, OEC</li></ul>
10:15 am – 10:30 am	Break
10:30 am – 11:00 am	National Emergency Communications Plan Goal 2 Results  • James Jarvis, OEC
11:00 am – 11:30 am	<ul> <li>Wisconsin Data Systems</li> <li>Tom Swadley, Management Information Coordinator, Fox Com Coordinator</li> <li>Department of Transportation / State Patrol Data Project Representative</li> </ul>
11:30 am – 12:30 pm	Lunch Break
12:30 pm – 3:45 pm	Planning for Wireless Broadband Module Broadband 101 – A Review Making Broadband a Priority—Identify Key Stakeholders Develop SCIP Initiatives and Action Plan  Scott Wiggins, OEC Support, Facilitator
3:45 pm – 4:00 pm	Next Steps and Wrap up  Scott Wiggins, OEC Support, Facilitator

May 2012 B-2

# APPENDIX C – WORKSHOP PARTICIPANTS

Name (First, Last)	Title	Organization (please spell acronyms)	Email	Phone
Jim Backus	Chief Deputy	Clark County Sheriff	jim.backus@co.clark.wi.us	715-743-5370
Charles Burki	Director	Milwaukee Police Department	cburki@milwaukee.gov	414-935-7205
John Dejung	Director	Dane County 9-1-1	dejung@countyofdane.com	608-267-2507
Kurt Drezek	Lieutenant	Milwaukee Police Department	kdreze@milwaukee.gov	414-286-5130
Greg Engle	Program Director	Office of Justice Assistance (OJA)	greg.engle@wi.gov	608-266-9544
Andrew Faust	NE Coordinator	North-Central Regional Planning Commission	afaust@ncwrpc.org	715-849-5510
Carl Guse	Frequency Specialist	Wisconsin State Patrol	carl.guse@dot.wi.gov	608-266-2497
Steve Hansen	Chief	Racine Fire Department	steve.hansen@cityofracine.org	262-770-0959
Michelle Hartness	Director	Clark County Emergency Management	michelle.hartness@co.clark.wi.us	715-743-5100
Matthew Joski	Sheriff	Kewaunee County Sheriff	joskim@kewauneeco.org	920-388-7177
Keith Kesler	Director	Douglas County	keslerk@ci.superior.wi.us	715-395-1391
James Koleas	Member	State of Wisconsin Interoperability Council	jkoleas@wi.rr.com	414-418-3351
Kevin Lemke	Deputy Chief	Fond du Lac Police Department	klemke@fdl.wi.gov	920-322-3704
Anthony Lodel	FoxComm Application Technical Coordinator	FoxComm	lodel.tony@co.calumet.wi.us	920-418-2994
Jennifer Lord	Radio Communications	Department of Natural Resources	jennifer.lord@wi.gov	608-264-8545

May 2012 C-1

Name (First, Last)	Title	Organization (please spell acronyms)	Email	Phone
	Specialist			
Kent Maclaughlin	State Communication and Warning Officer	WI Department of Military Affairs	kent.maclaughlin@wi.gov	608-242-3250
Matthew Marmor	Emergency Management Director	Calumet County	marmor.matthew@co.calumet.wi.us	920-849-1473
Tad Matheson	NW Regional SCIP Coordinator	NW Regional Implementation Council	haztad@chartermi.net	715-398-7324
Gary McClelland	Communications Specialist	Wisconsin Department of Corrections	gary.mcclelland@wi.gov	920-436-3309
Kevin McGeary	Senior Consultant	L.R. Kimball	kevin.mcgeary@lrkimball.com	814-867-4566
Richard McVicar	Tech Services Manager	Dane County Public Safety Communication	mcvicar@co.dane.wi.us	608-283-2911
Eugene Oldenburg	Southeast Regional SCIP Coordinator	City of Milwaukee Emergency Management	golden@milwaukee.gov	414-248-1418
Tim Pierce	Communications Planner	Dane County Emergency Management	pierce.timothy@countyofdane.com	608-284-6891
John Schrader	Radio Systems Administrator	Washington County Sheriff's Department	john.schrader@co.washington.wi.us	262-355-6347
Robert Shultz	Paramedic	Gold Cross Ambulance	bschultz@goldcross.org	920-967-6069
David Spenner	Manager	Office of Justice Assistance	david.spenner@wi.gov	608-261-7535
Jeffrey Stauber	Regional Coordinator	East Central RSIC	spc-llc@new.rr.com	920-621-3306
Thomas Swadley	Management Information Coordinator	FoxComm	swadley.tom@co.calumet.wi.us	920-731-7306
Gerald Thorpe	Coordinator	Menomonee Tribal Police Department	gthorpe@mitw.org	715-799-5811

May 2012 C-2

Name (First, Last)	Title	Organization (please spell acronyms)	Email	Phone
Joe Treml	Lieutenant	Kewaunee County Sheriff	tremlj@kewauneeco.org	920-388-7189
Richard VanBoxtel	Chief	Oneida County Police Department	rvanboxt@oneidanation.org	920-869-2239
Jan Victorson	Coordinator	Bayfield County Emergency Management	jvictorson@bayfieldcounty.org	715-373-6113
Markley Wahl		Wisconsin Department of Administration	markley.wahl@wisconsin.gov	608-264-9581
James Westover	Support Specialist	Interoperable Communications User	jamesl.westover@wi.gov	608-266-9570
Alan Wisler	Radio Technician	Marathon County Sheriff	alan.wisler@co.marathon.wi.us	715-261-1218
Paul Witttkamp	Coordinator	State EMS Communications	paul.wittkamp@wisconsin.gov	608-261-9306
Jacob Woodford	Intern	Calumet County Emergency Management	Jacob.a.woodford@lawrence.edu	920-574-0332
Tony Peterson		Office of Justice Assistance	tony.peterson@wisconsin.gov	608-235-2586
Warren Warrington	Sergeant	Menominee Police Department		715-799-5809
Adrienne Werner	Stakeholder Engagement	Office of Emergency Communications (OEC)	Adrienne.werner@hq.dhs.gov	202-343-1613
Jim Jarvis	Regional Coordinator	OEC	james.jarvis@hq.dhs.gov	202-834-0631
Scott Wiggins	Facilitator, Support	OEC	swiggins@fedeng.com	651-983-9306
Lauren DeWolfe	Co-Facilitator, Support	OEC	dewolfe_lauren@bah.com	

May 2012 C-3